

Application No. 10/019,615
Attorney Docket No. 12785US01

REMARKS

The present application includes claims 1-61. Claims 1-61 were rejected. By this Amendment, claims 1, 26, 32, and 57 have been amended and claim 27 has been canceled.

Claims 26 and 27 were objected to by the Examiner for informalities. The claims have been amended as directed by the Examiner.

Claims 1-31 and 57-61 were rejected under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement.

Claims 57-61 were rejected under 35 U.S.C. §101 as being directed to non-statutory subject matter.

Claims 1-4, 7, 12, 15-16, 18-19, 21-21, 26-27, 32-35, 38, 43, 47, 50, 52-53, and 57 were rejected under 35 U.S.C. §102(e) as being anticipated by Rabipour, U.S. Pat. No. 6,011, 846.

Claims 5-6, 13-14, and 36-37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Strawczynski, U.S. Pat. No. 6,138,022.

Claims 8-9 and 39-40 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Gritton, U.S. Pat. No. 5,857,167.

Claims 10-11, 21, 23-25, 41, 42, 46, 49, 51, and 54-56 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen, U.S. Pat. No. 5,651,091.

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Claim 17 was rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Christensson, U.S. Pat. No. 6,510,224.

Claims 28-31 and 58-61 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Navaro, U.S. Pat. No. 6,108,560.

Claims 44-45 were rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen and further in view of Strawczynski.

Claim 48 was rejected under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen and further in view of Christensson.

The Applicant now turns to the rejection of claims 1-31 and 57-61 under 35 U.S.C. §112, first paragraph as failing to comply with the enablement requirement. The rejected claims include independent claims 1 and 57. The Examiner asserts that the claims are single "means" claims and consequently asserts that the claims are subject to an undue breadth rejection, apparently applying MPEP 2164.08(a).

However, claims 1 and 57 are not "means" claims. MPEP 2818(I) sets forth the requirements for a claim to be a "means" claims. Specifically, the claim limitation must use the phrase "means for" or "step for", the "means for" must be modified by functional language, and the "means for" must not be modified by sufficient structure. However, neither of claims 1 or 57 include the "means for" language and consequently are not "means" claims.

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However, in an effort to move prosecution along, claims 1 and 57 have been rewritten in a format that it is hoped is more acceptable to the Examiner.

The Applicant now turns to the rejection of claims 57-61 under 35 U.S.C. §101 as being directed to non-statutory subject matter. More specifically, the Examiner asserts that claim 57 is directed to a method comprising "adjusting first bits and second bits" and that the use of such language indicates that claim 57 is directed to an abstract idea that does not product a useful, concrete, tangible result.

However, claim 57 has been amended to recite in the body of the claim that adjusting the bits is performed "in order to control the echo characteristics of said near-end digital signal." The Applicant respectfully submits that controlling the echo characteristic of a digital signal is a useful and tangible result. Consequently, the rejection is respectfully traversed.

The Applicant now turns to the rejection of claims 1-4, 7, 12, 15-16, 18-19, 21-21, 26-27, 32-35, 38, 43, 47, 50, 52-53, and 57 under 35 U.S.C. §102(e) as being anticipated by Rabipour, U.S. Pat. No. 6,011, 846. Rabipour teaches method and apparatus for echo suppression in a frame of data. In Rabipour, a near end signal and a far end signal are examined to determine whether the near end signal includes echo. However, Rabipour performs echo determination on a frame-by-frame basis, not in subframes. This is described beginning at Col. 3, Line 48 "the processor 110 receives a frame of LPC-

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encoded information for the near end signal, and a frame of LPC-encoded information for the far end signal” and at Col. 5, Line 33 “ the processor 110 declares frame k of the near end signal to contain echo” and Col. 6, Line 20 “For each successive 20ms time interval (called a “frame”), the processor 110 receives a set of LPC coefficients” and is shown in Figure 3, where only whole frame are replaced.

Consequently, Rabipour does not teach partially decoding a subframe of near end data and far end data and determining the presence of echo based on the subframes of data. Conversely, such an embodiment is illustrated in the present specification beginning at the bottom of page 20.

Claims 1-4, 7, 12, 15-16, 18-19, 21-21, 26-27, 32-35, 38, 43, 47, 50, 52-53, and 57 include independent claims 1, 26, 32, and 57, each of which has been amended to include the limitation of determining the presence of echo based on partially decoding subframes of data of a near end signal and a far end signal, which is respectfully submitted to be absent from Rabipour. Consequently, independent claims 1, 26, 32, and 57 are respectfully submitted to be allowable, as are their dependent claims 2-4, 7, 12, 15-16, 18-19, 21-21, 27, 33-35, 38, 43, 47, 50, and 52-53.

The Applicant now turns to the rejection of claims 5-6, 13-14, and 36-37 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Strawczynski, U.S. Pat. No. 6,138,022. Claims 5-6, 13-14, and 36-37 depend from independent claims 1 and 32, which are respectfully submitted to be allowable in light of the amendment above.

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Consequently, dependent claims 5-6, 13-14, and 36-37 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 8-9 and 39-40 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Gritton, U.S. Pat. No. 5,857,167. Claims 8-9 and 39-40 depend from independent claims 1 and 32, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 8-9 and 39-40 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 10-11, 21, 23-25, 41, 42, 46, 49, 51, and 54-56 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen, U.S. Pat. No. 5,651,091. Claims 10-11, 21, 23-25, 41, 42, 46, 49, 51, and 54-56 depend from independent claims 1 and 32, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 10-11, 21, 23-25, 41, 42, 46, 49, 51, and 54-56 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claim 17 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Christensson, U.S. Pat. No. 6,510,224. Claim 17 depends from independent claim 1, which was respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claim 17 is also respectfully submitted to be allowable.

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The Applicant now turns to the rejection of claims 28-31 and 58-61 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Navaro, U.S. Pat. No. 6,108,560. Claims 28-31 and 58-61 depend from independent claims 1 and 57, which are respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 28-31 and 58-61 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claims 44-45 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen and further in view of Strawczynski. Claims 44-45 depend from independent claim 32, which was respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claims 44-45 are also respectfully submitted to be allowable.

The Applicant now turns to the rejection of claim 48 under 35 U.S.C. §103(a) as being unpatentable over Rabipour in view of Chen and further in view of Christensson. Claim 48 depends from independent claim 32, which was respectfully submitted to be allowable in light of the amendment above. Consequently, dependent claim 48 is also respectfully submitted to be allowable.

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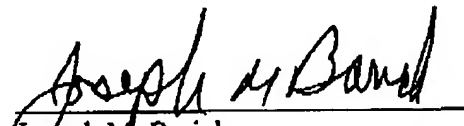
CONCLUSION

If the Examiner has any questions or the Applicant can be of any assistance, the Examiner is invited and encouraged to contact the Applicant at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of McAndrews, Held & Malloy, Account No. 13-0017.

Respectfully submitted,

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